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KOPPERS

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September 2, 1986

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FEDERAL EXPRESS

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Mr. Larry D. Wright, Chief Superfund Enforcement Section US Environmental Protection Agency Region VI 1201 Elm Street Dallas, TX 75270

Re:

South Cavalcade Site

Dear Mr. Wright:

Pursuant to your letter concerning Koppers' attempt to locate the abandoned, 552 foot, onsite well, Koppers hereby presents a summary of the efforts taken to locate the well and all the information that has been accumulated.

Background Information

Information of an abandoned water well onsite was first indicated during the Well Inventory, Subtask ID (MRA Report No. 85-317 dated May 28, 1985). Recorded water wells within a three mile radius of the site were documented. The Texas Water Development Board (TWDB) Report 178, Volume II, indicates a recorded well (65-14-427) which was originally drilled for the Wood Preserving Corporation in 1912 (See Attachment 1). This well was suspected to be onsite, because of the recorded ownership. A review of the property ownership records by Plauning Research Corporation (PRC) in their Title Search Letter Report dated August 30, 1985 indicated that the National Lumber & Creosote Company were the owners of the site in 1912. The Wood Preserving Corporation apparently took ownership in 1938.

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According to the information in the Texas Water Development Board Report 178, the suspect well was drilled by Taylor and Roberts in 1912, to a depth of 552 feet and included a 10 inch diameter steel casing. The well was also used in 1931 and 1942 as a water level observation well. The TWDB record indicates the well was destroyed.

The Water Resources Division of the U.S. Department of the Interior, Geological Survey (USGS) was contacted regarding records of water levels for Well No. 65-14-427. These records indicate the well water level was measured on January 14, 1931 and November 7, 1938. Documents from the USGS include a hand written note indicating the location of the well as being ".....about 400 feet N.W. of the junction of the two railroads. The well is beside the water tower". This note was apparently written in 1938 (See Attachments B and C).

The USGS reports indicate the plant was operating on city supplied water by November 7, 1938, and that the well was abandoned by July 15, 1941. The report lists longitude and latitude coordinates for the well.

Summary of the Well Search

John Cochran, EPA suggested in early 1986 that Koppers investigate the site for the abandoned well. He offered to share the best technology used by EPA for locating abandoned wells. His information as well as the information Koppers was able to find, was incomplete. Nevertheless, considerable effort has been spent during the past five months in locating the suspected well. A summary of the efforts are as follows:

- l. Employee interviews.
- 2. Company records search.
- 3. Agency file review.
- 4. Aerial photograph interpretation.

 5. Metal detection
- Metal detector survey.
- 6. Magnetometer survey.
- 7. Test trench excavation.

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Historic plans of the former plant layout from Koppers Company fire insurance maps (August 26, 1947 and December 1951 were reviewed in an attempt to locate the water tower mentioned in the USGS records. The reference of 400 feet N.W. of the junction of the two railroads is difficult to interpret due to the numerous railroad spurs and lines onsite. Both site maps do not indicate a water tower or well onsite. The well was abandoned by 1941 according to the USGS report and the water tower may have been removed from the site and therefore not shown on the 1947 or 1951 site maps.

Another Koppers document references the water tower and two wooden tanks which were evidently moved from Kansas City to the Houston plant in 1912 (See Attachment D). There is also a list of associated well pumping and fire protection equipment along with an explanation of how the well, tanks and water tower were operated. This document refers to the well as being 552 feet deep which corresponds with the TWDB record well No. 65-14-427. This evidence suggests that water tower referenced in the USGS hand written note and the tower moved from Kansas City in 1912 are the same.

Aerial photographs of the plant site have been reviewed for years 1930, 1938, 1944, 1953, 1957, 1964, 1969, 1975, and 1980 in an attempt to locate the referenced water tower.

Based on the aerial photo information, employee interviews, and the Koppers site maps, an on-site survey was conducted by MRA with a Relco Industries metal detector in the area of Merchants employee east parking lot. This area corresponds to the previous locations of the pump house and water storage tanks. A total of 14 anomalies were detected by the metal detector and marked in the field. The area which corresponds with the reported USGS longitude and latitude well coordinates was located in the Palletized Trucking parking lot and was also surveyed with the metal detector. Due to the steel reinforced concrete pavement in this area and numerous utilities the metal detector was unreliable.

A magnetometer survey was conducted by Sorrell Exploration Company on May 17, 1986, May 20, 1986 and June 7, 1986 in an attempt to further define the location of the suspect well and to evaluate the recorded metal detector anomalies. Details of the survey and corresponding results are presented in MRA letter dated June 27, 1986. Generally, five areas of anomalous magnetic responses were interpreted from the survey. A copy of this letter and map is attached. The attachment attributes all but one of the responses to buried utility lines, a light pole, or a metal building.

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The largest recorded magnetic response from the survey corresponds with the area adjacent to the former salts storage and metal shop buildings. This area was excavated by Colt Services, Inc., on August 12 and 13, 1986 using a backhoe in an attempt to locate the source of the magnitude response. During the excavation, a buried metal vat, approximately 10 feet wide and of unknown length, was encountered. Magnetometer measurements taken within the excavation indicated two areas with anomalous magnetic responses. A portion of the unearthed vat was removed from the excavation to evaluate the two anomalous magnetic areas. That portion of the vat was placed aside the excavation in the parking area. While Magnetometer readings made on and around the removed portion of the vat were not significantly higher than average background magnetometer readings, it is thought the vat may have been responsible for the original magnetic response since it was found to include ferrous compounds. Additionally, no visual evidence of a suspected abandoned water well was observed

I will be unavailable for a conference call on September 4 but suggest September 5 as an alternate date. Should you have any questions, please contact me at (412) 227-2689.

SC:m Enclosures KSC-RI/FS-53

cc: D. Sorrels (TWC) Enc.

Sincerely yours.

James R. Campbell, Ph. D.

Program Manager

Previously Operated Properties

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